

From

Applicant: University of California
Filed: Herewith
Docket: 1133.010WO1
Title: Bryostatins, Bryopyrans and Polyketides:
Compositions and Methods

COMPUTER READABLE FORM:

Medium Type: Diskette
Computer: IBM compatible
Operating System: WINDOWS 95
Software: FastSEQ Version 4.0

Date Recorded: August 3, 2000

1133.010WO1

INTERNATIONAL PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA et al.
Serial No.: New Filing
Filed: 04 August 2000 Docket: 1133.010WO1
Title: BRYOSTATINS, BRYOPYRANS, POLYKETIDES:
COMPOSITIONS AND METHODS

COMMUNICATION REGARDING SEQUENCE LISTING

BOX PCT
Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In accordance with Rule 1.821(e) and in compliance with WIPO Standard ST.23, submitted herewith is a copy of the SEQUENCE LISTING in computer readable form, as recited at pages 1- 80 of the above-identified international application also submitted herewith.

It is respectfully submitted that the contents of the paper version of the SEQUENCE LISTING recited at pages 1- 80 and the computer readable version of the same, both of which are submitted herewith, are identical. The enclosed SEQUENCE LISTING has been converted into the ASCII format using the Word(Perfect) conversion tool.


Please direct any inquiry to the below-signed attorney at (612) 373-6900.

Respectfully submitted,

SCHWEGMAN, LUNDBERG,
WOESSNER & KLUTH
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 373-6900

Date: 04 August 2000

By


Ann S. Viksnins
Reg. No. 37,748

SEQUENCE LISTING

<110> University of California

5<120> Bryostatins, Bryopyrans and Polyketides: Compositions
and Methods

<130> 1133.010W01

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<150> 60/147,283

<151> 1999-08-04

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 50 55 60
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25

30

Asn Ile Gly His Leu Asp Val Ala Ala Gly Val Val Gly Leu Ile Lys

35

40

45

5

Thr Ala Leu Ser Leu Gln His Arg Leu Leu Pro Pro Thr Ile Asn Tyr

50

55

60

Glu Ala Pro Asn Arg Glu Ile Asn Phe Glu Gln Ser Pro Phe His Val

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Asn Ile Gly His Thr Ser Ala Ala Ser Gly Val Ala Gly Ile His Lys
5 35 40 45

Val Leu Leu Ser Leu Lys His Arg Gln Leu Val Ala Ser Leu His Phe
50 55 60

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35 40 45

Ala Val Leu Ala Met Gln His Gly Val Ile Pro Gln Gln Leu His Cys
10 50 55 60

Lys Glu Pro Ser Pro His Ile Pro Trp Lys Arg Leu Pro Leu Asp Leu
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35 40 45

10Ser Leu Tyr His Gly Lys Ile Ala Pro Asn Ala Gly Asn Thr Glu Pro
50 55 60

Asn Ala Ala Leu Asn Leu Asp Ala Phe His Phe Ala Leu Pro Lys Thr
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cactgtcaca aattgaatcc gcttctggat atcgacggct tcaatgttgt gttcccgag 240
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Leu Val Leu Gln His Gly Val Ala Pro Ala Asn Leu His Cys His Lys
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Leu Asn Pro Leu Leu Asp Ile Asp Gly Phe Asn Val Val Phe Pro Gln
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25

30

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35

40

45

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50

55

60

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30<211> 1954

<212> DNA

<213> Endobugula sertula

<220>

35<221> misc_feature

<222> (1)..(1954)

<223> N refers to any nucleotide

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<212> DNA

<213> Endobugula sertula

40<220>

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<222> (1)..(2672)

<223> N refers to any nucleotide

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<211> 2132

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<213> Endobugula sertula

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<221> misc_feature

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<223> N refers to any nucleotide

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<210> 36

<211> 2169

<212> DNA

25<213> Endobugula sertula

<220>

<221> misc_feature

<222> (1)..(2169)

30<223> N refers to any nucleotide

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1

5

10

15

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20

25

30

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255

5

20

35

Leu Ser Gly Gln Tyr Pro Lys Ser Lys Thr Leu Glu Gln Phe Trp Gln
40 450 455 460

Figure 1 consists of 12 histograms arranged in a single column. Each histogram represents the distribution of the number of non-zero elements in the vector x for a specific value of n . The x-axis for all histograms is labeled 'x' and ranges from 0 to 120. The y-axis is labeled 'count' and ranges from 0 to 100. The histograms are for $n = 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120$. As n increases, the distribution becomes more concentrated around zero, with the peak count increasing and the spread decreasing.

	Thr	Leu	Ala	Asp	Gly	Val	Asp	Cys	Ile	Ser	Glu	Ile	Pro	Ala	Asp	Arg
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	Trp	Ser	Leu	Glu	Glu	Tyr	Tyr	Ser	Pro	Ile	Pro	Glu	Gly	Gly	Lys	Thr
5					485					490					495	
	Tyr	Cys	Lys	Trp	Met	Gly	Val	Leu	Glu	Asp	Met	Asp	Cys	Phe	Asp	Pro
				500					505					510		
10	Leu	Phe	Phe	Ala	Ile	Ser	Pro	Arg	Glu	Ala	Glu	Val	Met	Asp	Pro	Gln
			515					520					525			
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		530					535					540				
15																
	Ile	Asn	Pro	Lys	Met	Leu	Ser	Arg	Ser	Arg	Cys	Gly	Val	Phe	Val	Gly
	545					550					555					560
	Cys	Gly	Ala	Asn	Asp	Tyr	Ser	Ala	Leu	Met	Asn	Ser	Ser	His	Ser	Thr
20					565					570					575	
	Ser	Leu	Glu	Leu	Met	Lys	Glu	Leu	Gly	Asn	Asn	Ser	Ser	Ile	Leu	Ser
				580					585					590		
25	Ala	Arg	Ile	Ser	Tyr	Phe	Leu	Asn	Leu	Lys	Gly	Pro	Cys	Leu	Ala	Ile
			595					600					605			
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		610					615					620				
30																
	Ser	Leu	Val	Leu	Gly	Thr	Ser	Asp	Leu	Ala	Leu	Ala	Gly	Gly	Val	Leu
	625					630					635					640
	Leu	Met	Pro	Gly	Pro	Ser	Leu	His	Ile	Gly	Leu	Ser	His	Gly	Glu	Met
35					645					650					655	
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675

680

685

Asp Ala Val Arg Asp Gly Asp Pro Ile Arg Ala Val Ile Arg Gly Trp

690

695

700

5

Gly Val Asn Gln Asp Gly Arg Ser Asn Gly Ile Thr Ala Pro Ser Ser

705

710

715

720

Lys Ala Gln Ser Ala Leu Glu Gln Glu Val Tyr Gln Arg Phe Asn Ile

10

725

730

735

Asp Pro Ser Ser Ile Thr Leu Val Glu Ala His Gly Thr Gly Thr Lys

740

745

750

15Leu Gly Asp Pro Ile Glu Val Glu Ala Leu Ala Glu Ser Phe Arg Val

755

760

765

Tyr Thr Asp Lys Arg His Tyr Cys Ala Leu Gly Ser Val Lys Ser Asn

770

775

780

20

Ile Gly His Leu Gly Val Gly Ala Gly Ile Ala Gly Val Thr Lys Val

785

790

795

800

Leu Leu Ser Leu Gln His Arg Met Leu Pro Pro Thr Ile His Cys Glu

25

805

810

815

Asp Val Asn Pro Gln Ile Ala Leu Glu Gly Ser Pro Phe Tyr Ile Asn

820

825

830

30Thr Glu Leu Lys Pro Trp Gln Ser Gly Asp Ser Ile Pro Arg Arg Ala

835

840

845

Gly Val Ser Ser Phe Gly Phe Ser Gly Thr Asn Ala His Leu Val Leu

850

855

860

35

Glu Glu Tyr Leu Pro His Ser Thr Gly Thr Ile Glu Ser Phe Ala Ala

865

870

875

880

Asn His Ala Ser Thr Val Ile Ile Pro Leu Ser Ala Lys Ser His Asn

40

885

890

895

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 10 1155 1160 1165
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 Tyr Thr Asp Val Ser Lys Ala Phe Leu Met His Gly Gln Glu His Tyr
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 Gly Glu Gln Tyr Pro Tyr Leu Ser Tyr Cys Leu Cys Asn Ile Glu Gln
 40 1315 1320 1325

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Asp Leu Val Ala Gln Gly Ile Ser Val Gly Asp Tyr Asp Ile Ala Ile
 1330 1335 1340

Ala Ala Asn Val Leu His Ala Thr Arg Asn Ile His Glu Thr Val Ser
 51345 1350 1355 1360

His Val Arg Gln Ala Leu Ala Ala Asn Gly Leu Leu Ile Leu Asn Glu
 1365 1370 1375

10Phe Ser Gln Lys Ser Val Phe Ser Ser Val Ile Phe Gly Leu Ile Asp
 1380 1385 1390

Gly Trp Ala Leu Ser Glu Asp Thr Gly Leu Arg Ile Pro Gly Ser Pro
 1395 1400 1405

15

Gly Leu Tyr Pro Lys Gln Trp Gln Ala Val Leu Glu Ala Ser Gly Phe
 1410 1415 1420

Gly Asp Val Glu Phe Pro Leu His Asp Ala Arg Glu Leu Gly Gln Gln
 201425 1430 1435 1440

Ile Ile Leu Ala Thr Asn Ala His Ala Asn Val Ala Ser Asp Leu Ala
 1445 1450 1455

25Thr Ser Val Ile Asp His Ala Pro Lys Arg Leu Pro Ser Ala Glu Val
 1460 1465 1470

Ser Met Asp Glu Arg Val Ser His Asp Ala Met Met Lys Ala Ser Val
 1475 1480 1485

30

Lys Gln Leu Leu Val Glu Gln Leu Ser Gln Ser Leu Lys Leu Asp Met
 1490 1495 1500

Asn Glu Ile His Pro Asp Glu Ser Phe Ala Asp Tyr Gly Val Asp Ser
 351505 1510 1515 1520

Ile Thr Gly Ala Ser Phe Ile Gln Gln Leu Asn Asp Thr Leu Thr Leu
 1525 1530 1535

40Thr Leu Lys Thr Val Cys Leu Phe Asp His Ser Ser Val Asn Arg Leu

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1540 1545 1550
 Thr Ala Tyr Leu Leu Ser Asp Tyr Gly Asp Asp Ile Ala Gln Trp Leu
 1555 1560 1565
 5
 Ala Thr Ala Pro Ala Leu Val Asp His Pro Gln Ser Val Val Ser Gln
 1570 1575 1580
 Val Leu Pro Glu Arg Ser Pro Ala Ser Thr Gln Ala Lys Pro Leu Pro
 101585 1590 1595 1600
 Ser Val Pro Pro Ser Leu Ser Met Glu Ser Pro Val Gln Gln Glu Ser
 1605 1610 1615
 15Ile Ala Ile Ile Gly Met Ser Gly Arg Phe Ala Ala Ser Glu Asn Leu
 1620 1625 1630
 Glu Ala Phe Trp Gln Gln Leu Ala Gln Gly Val Asp Leu Val Glu Pro
 1635 1640 1645
 20
 Ala Ser Arg Trp Gly Pro Gln Ala Glu Thr Tyr Tyr Gly Ser Phe Leu
 1650 1655 1660
 Lys Asp Met Asp Gln Phe Asp Pro Leu Phe Phe Asn Leu Ser Gly Val
 251665 1670 1675 1680
 Glu Ala Ser Tyr Met Asp Pro Gln Gln Arg Cys Phe Leu Glu Glu Ser
 1685 1690 1695
 30Trp Asn Ala Leu Glu Asn Ala Gly Tyr Val Gly Asp Gly Ile Glu Gly
 1700 1705 1710
 Lys Arg Cys Gly Ile Tyr Ala Gly Cys Val Ser Gly Asp Tyr Ala Gln
 1715 1720 1725
 35
 Leu Leu Gly Asp Gln Pro Pro Pro Gln Ala Phe Trp Gly Asn Ala Ser
 1730 1735 1740
 Ser Ile Ile Pro Ala Arg Ile Ala Tyr Tyr Leu Asn Leu Gln Gly Pro
 401745 1750 1755 1760

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10Trp Cys Arg Tyr
1810